

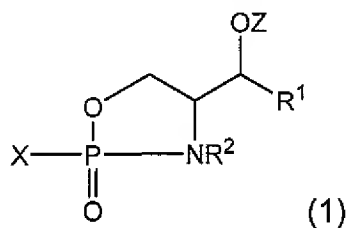
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. – 56. (Canceled)

57. (Currently Amended) An oxazaphospholane compound of formula (1):



wherein

R^1 represents a C_1 - C_{24} aliphatic moiety which may be a saturated or unsaturated, branched or linear chain, optionally comprising an aliphatic ring,

R^2 represents a hydrogen atom or hydrophobic group, the hydrophobic group is a C_1 - C_{24} aliphatic moiety which is a saturated or unsaturated, branched or linear aliphatic chain, the aliphatic chain optionally comprising an aliphatic ring, the aliphatic chain or ring optionally substituted with one or more substituents comprising a heteroatom selected from the group consisting of oxygen, halogen, nitrogen and sulfur,

Z represents a protecting group selected from the group consisting of methoxymethyl (MOM), tetrahydropyranyl (THP), diphenylmethyl, triethylsilyl (TES), *t*-butyldimethylsilyl (TBDMS), mesitoate, 9-fluorenylmethyl carbonate (f-moc), *t*-butyl carbamate (t-boc), and $\text{Si}(\text{R}^5)_3$, R^5 being the same or different within the $\text{Si}(\text{R}^5)_3$, the protecting group being a $\text{C}_1\text{-C}_6$ branched or straight alkyl group, or an aryl group, and

X represents a chemical moiety that is replaced under nucleophilic attack in the presence of a nucleophilic reagent and is selected from the group consisting of a halogen atom, borate, ethylene chlorophosphite, methyl phosphodichloridite, chloro-N,N-diisopropylaminomethoxophosphite, and [(isopropyl)2N]2POCH2CH2CN,

wherein X is optionally substituted with a group selected from the group consisting of an alcohol, an ether, a polyether and a sugar moiety,

wherein the alcohol contains an aliphatic moiety selected from the group consisting of an aliphatic chain, an amino aliphatic chain, a heteroatom comprising an aliphatic chain, an aliphatic chain comprising a cyclic ring which ring may be saturated or partially saturated and an aryl group, the aliphatic chain may be a branched or straight, saturated or unsaturated chain.

59. (Previously presented) The oxazaphospholane compound of claim 57, wherein R^1 represents a C_8-C_{24} aliphatic moiety.

60. (Previously Presented) The oxazaphospholane compound of claim 57, wherein R^2 represents a hydrogen atom or a saturated or unsaturated C_8-C_{24} aliphatic moiety.

61. (Previously presented) The oxazaphospholane compound of claim 60, wherein R^2 represents a hydrogen atom.

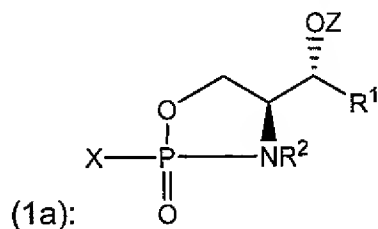
62. (Previously presented) The oxazaphospholane compound of claim 57, wherein X represents a halogen atom.

63. (Previously presented) The oxazaphospholane compound of claim 62, wherein X represents Cl.

64. (Previously Presented) The oxazaphospholane compound of claim 57, wherein Z represents a $Si(R^5)_3$ group in which R^5 may be the same or different in the same compound and represents a C_1-C_6 branched or straight alkyl group or an aryl group.

65. (Previously Presented) The oxazaphospholane compound of claim 57, wherein Z represents $Si(Ph)_2(t-Bu)$.

66. (Previously Presented) An oxazaphospholane compound of formula

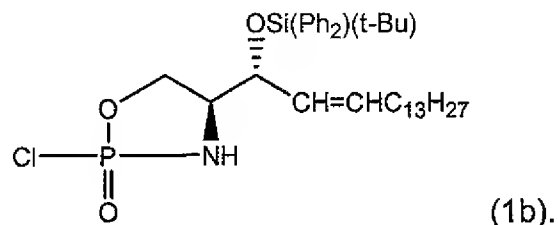


(1a) being the 2S,3R stereoisomer of the compound of claim 57, wherein R¹, R², X and Z are as defined in the Claim 57.

67. (Previously presented) The oxazaphospholane compound of claim 57, wherein R¹ is (E)-CH=CHC₁₃H₂₇, R² is hydrogen, X is Cl and Z is Si(Ph)₂(t-Bu).

68. (Previously Presented) The oxazaphospholane compound of claim 57, wherein R¹ is (E)-CH=CHC₁₃H₂₇, R² is hydrogen, and X is substituted with the group -O-CH₂-CH₂-N⁺(CH₃)₃.

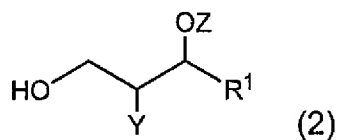
69. (Previously Presented) The oxazaphospholane compound of claim 57, being the (*E*)-geometrical isomer of the compound of formula (1b):



70. (Previously presented) The oxazaphospholane compound of claim 57, being an isolated stable compound.

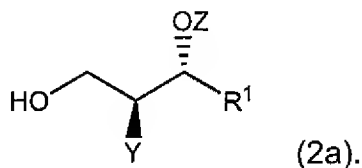
71. (Previously Presented) A process for the manufacture of an oxazaphospholane compound of formula (1) as defined in claim 57, the process comprising

reacting a phosphorylating reagent selected from the group consisting of POW_3 , where W represents a halogen atom, an ethylene chlorophosphite, a methyl phosphodichloridite, a chloro-N,N-diisopropylaminomethoxophosphite and $[(\text{isopropyl})_2\text{N}]_2\text{POCH}_2\text{CH}_2\text{CN}$ with a 3-O-protected sphingoid compound of formula (2):



wherein R^1 , Z and X are as defined in claim 57, and Y is an amine or an amino group.

72. (Previously Presented) The process of claim 71, further comprising reacting the phosphorylating reagent with a 2S, 3R stereoisomer of formula (2a):

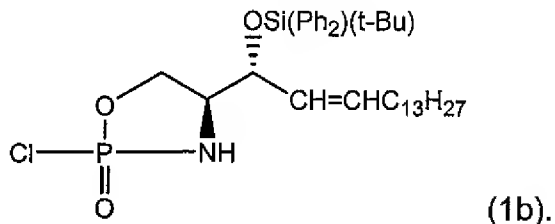


73. (Previously Presented) The process of claim 71, wherein the phosphorylating reagent is reacted with the protected sphingoid compound in which Y represents NH_2 .

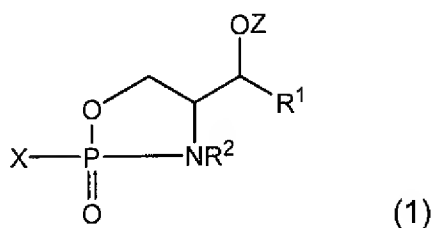
74. (Cancelled)

75. (Previously Presented) The process of claim 71, wherein the phosphorylating reagent is POCl_3 .

76. (Previously Presented) The process of claim 71, for the synthesis of the (E)-geometrical isomer of the compound of formula (1b):



77. (Currently Amended) An oxazaphospholane compound of formula (1):



wherein

R^1 represents a C_1 - C_{24} aliphatic moiety which may be a saturated or unsaturated, branched or linear chain, optionally comprising an aliphatic ring,

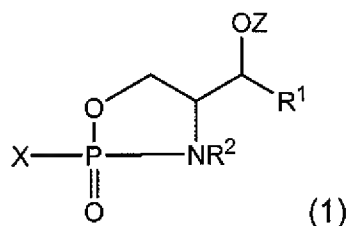
R^2 represents a hydrogen atom or hydrophobic group, the hydrophobic group is a C_1 - C_{24} aliphatic moiety which is a saturated or unsaturated, branched or linear aliphatic chain, the aliphatic chain optionally comprising an aliphatic ring, the aliphatic chain or ring optionally substituted with one or more substituents comprising a heteroatom selected from the group consisting of oxygen, halogen, nitrogen and sulfur,

Z represents a protecting group selected from the group consisting of methoxymethyl (MOM), tetrahydropyranyl (THP), diphenylmethyl, triethylsilyl (TES), *t*-butyldimethylsilyl (TBDMS), mesitoate, 9-fluorenylmethyl carbonate (f-moc), *t*-butyl carbamate (t-boc), and $\text{Si}(\underline{R^5})_3$, $\text{Si}(\underline{R^5})_3$, $[[\underline{R^5}]] \underline{R^5}$ being the same or different within the $\text{Si}(\underline{R^5})_3$, $\text{Si}(\underline{R^5})_3$ and a C_1 - C_6 branched or straight alkyl group, or an aryl group, and

X represents a chemical moiety that is replaced under nucleophilic attack in the presence of a nucleophilic reagent, obtainable by the process of claim 71.

78-104. (Cancelled)

105. (Currently Amended) An oxazaphospholane compound of formula (1):



wherein

R^1 represents a C_1 - C_{24} aliphatic moiety which may be a saturated or unsaturated, branched or linear chain, optionally containing an aliphatic ring;

R^2 represents a hydrogen atom or hydrophobic group, the hydrophobic group is a C_1 - C_{24} aliphatic moiety selected from a saturated or unsaturated, branched or linear aliphatic chain, the aliphatic chain optionally containing an aliphatic ring, the aliphatic chain or ring optionally substituted with one or more substituents containing a heteroatom selected from the group consisting of oxygen, halogen, nitrogen and sulfur;

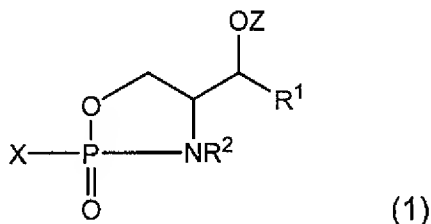
Z represents a protecting group selected from the group consisting of methoxymethyl (MOM), tetrahydropyranyl (THP), diphenylmethyl, triethylsilyl (TES), *t*-butyldimethylsilyl (TBDMS), mesitoate, 9-fluorenylmethyl carbonate (f-moc), *t*-butyl carbamate (*t*-boc), and $\text{Si}(\text{R}^5)_3$, wherein R^5 may be the same or different in the same moiety and is selected from a C_1 - C_6 branched or straight alkyl group or an optionally substituted aryl group; and

X represents a leaving group selected from the group consisting of a halogen atom, borate, ethylene chlorophosphite, methyl phosphodichloridite, chloro-N,N-diisopropylaminomethoxophosphite, and $[(\text{isopropyl})_2\text{N}]_2\text{POCH}_2\text{CH}_2\text{CN}$, wherein X is

optionally substituted with a group selected from the group consisting of an alcohol, an ether, a polyether, and a sugar moiety, wherein the alcohol contains an aliphatic moiety selected from the group consisting of an aliphatic chain, an amino aliphatic chain, a heteroatom comprising an aliphatic chain, an aliphatic chain comprising a cyclic ring which ring may be saturated or partially saturated, and an aryl group, the aliphatic chain may be a branched or straight, saturated or unsaturated chain.

106. (Cancelled)

107. (Previously Presented) An oxazaphospholane compound of formula (1):



obtainable by the process of claim 71, wherein

R^1 represents a C_1 - C_{24} aliphatic moiety which may be a saturated or unsaturated, branched or linear chain, optionally containing an aliphatic ring;

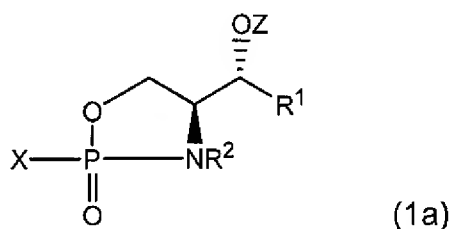
R^2 represents a hydrogen atom or hydrophobic group, the hydrophobic group is a C_1 - C_{24} aliphatic moiety selected from a saturated or unsaturated, branched or linear aliphatic chain, the aliphatic chain optionally containing an aliphatic ring, the aliphatic chain or ring optionally substituted with one or more substituents containing a heteroatom selected from the group consisting of oxygen, halogen, nitrogen and sulfur;

Z represents a protecting group selected from the group consisting of methoxymethyl (MOM), tetrahydropyranyl (THP), diphenylmethyl, triethylsilyl (TES), *t*-butyldimethylsilyl (TBDMS), mesitoate, 9-fluorenylmethyl carbonate (f-moc), *t*-butyl carbamate (t-boc), and $\text{Si}(\text{R}^5)_3$, wherein R^5 may be the same or different in the same moiety and is selected from a $\text{C}_1\text{-C}_6$ branched or straight alkyl group or an optionally substituted aryl group; and

X represents a leaving group selected from the group consisting of a halogen atom, borate, ethylene chlorophosphite, methyl phosphodichloridite, chloro-N,N-diisopropylaminomethoxophosphite, and $[(\text{isopropyl})_2\text{N}]_2\text{POCH}_2\text{CH}_2\text{CN}$, wherein X is optionally substituted with a group selected from the group consisting of an alcohol, an ether, a polyether, and a sugar moiety, wherein the alcohol contains an aliphatic moiety selected from the group consisting of an aliphatic chain, an amino aliphatic chain, a heteroatom comprising an aliphatic chain, an aliphatic chain comprising a cyclic ring which ring may be saturated or partially saturated, and an aryl group, the aliphatic chain may be a branched or straight, saturated or unsaturated chain.

108. (Previously Presented) The oxazaphospholane compound according to claim 107, wherein R^1 represents a C_8 - C_{24} aliphatic moiety; or Z represents a $Si(R^5)_3$ group in which R^5 may be the same or different in the same compound and represents a C_1 - C_6 branched or straight alkyl group or an aryl group.

109. (Previously Presented) An oxazaphospholane compound of formula (1a):



obtainable by the process of claim 71, wherein

R^1 represents a C_1 - C_{24} aliphatic moiety which may be a saturated or unsaturated, branched or linear chain, optionally containing an aliphatic ring;

R^2 represents a hydrogen atom or hydrophobic group, the hydrophobic group is a C_1 - C_{24} aliphatic moiety selected from a saturated or unsaturated, branched or linear aliphatic chain, the aliphatic chain optionally containing an aliphatic ring, the aliphatic chain or ring optionally substituted with one or more substituents containing a heteroatom selected from the group consisting of oxygen, halogen, nitrogen and sulfur;

Z represents a protecting group selected from the group consisting of methoxymethyl (MOM), tetrahydropyranyl (THP), diphenylmethyl, triethylsilyl (TES), *t*-butyldimethylsilyl (TBDMS), mesitoate, 9-fluorenylmethyl carbonate (f-moc), *t*-butyl carbamate (*t*-boc), and $Si(R^5)_3$, wherein R^5 may be the same or different in the same

moiety and is selected from a C₁-C₆ branched or straight alkyl group or an optionally substituted aryl group; and

X represents a leaving group selected from the group consisting of a halogen atom, borate, ethylene chlorophosphite, methyl phosphodichloridite, chloro-N,N-diisopropylaminomethoxophosphite, and [(isopropyl)₂N]₂POCH₂CH₂CN, wherein X is optionally substituted with a group selected from the group consisting of an alcohol, an ether, a polyether, and a sugar moiety, wherein the alcohol contains an aliphatic moiety selected from the group consisting of an aliphatic chain, an amino aliphatic chain, a heteroatom comprising an aliphatic chain, an aliphatic chain comprising a cyclic ring which ring may be saturated or partially saturated, and an aryl group, the aliphatic chain may be a branched or straight, saturated or unsaturated chain.

110. (Previously presented) The oxazaphospholane compound according to claim 109,

wherein

R¹ represents a C₈-C₂₄ aliphatic moiety, or

Z represents a Si(R⁵)₃ group in which R⁵ may be the same or different in the same compound and represents a C₁-C₆ branched or straight alkyl group or an aryl group.

111. (Cancelled)